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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,946

03/19/2004

Takeshi Takezawa

119159

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25944

7590

05/04/2006

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EXAMINER

KONG, ANDREW D

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/803,946

Applicant(s)

TAKEZAWA ET AL.

Examiner

Andrew Kong

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 11-13 is/are rejected.
- 7) ☒ Claim(s) 14-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08).  
Paper No(s)/Mail Date Aug 4, 2004 Feb. 15, 2005 April 14, 2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of group II, claims 11-20 in the reply filed on April 5, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kai (U.S. Pat. No. 6,784,601) in view of Yajima (US Pub 2003/0025883). Kai teaches a projector (col1; line 16), comprising: a light source device (fig.3, 10) having a light-emitting tube (23, 24) that includes a light-emitting portion (25) that generates a light beam by an electric discharge between electrodes and sealing portions (23, 24) provided on both sides of the light-emitting portion and a heat-conductive member (41a) attached along the outer surface of at least one of the sealing portions, an end of the heat-conductive member being extended to a section near the light-emitting portion; the heat-conductive member is a cylindrical component (41a); the light source device has a reflector (11) that reflects a light beam irradiated by the light-

emitting portion of the light-emitting tube, wherein the first sealing portion (23) of the light-emitting tube is disposed on the side of the reflector and is fixed to the reflector through the cylindrical heat-conductive member attached to the first sealing portion, and wherein the first end of the heat-conductive member extends to the section near the light-emitting portion (41a) and a second end of the heat-conductive member (41c) opposite to the first end extends to the outside of the reflector with a heat-radiation fin (43) being attached to the second end.

Kai does not teach an optical system disposed on a light-irradiation side of the light source device, the optical system including an optical modulator that modulates a light beam irradiated by the light source in accordance with an input image information to form an optical image, and a color-combining optical device that combines each color light from the optical modulator.

Yajima teaches a projector comprising an optical system (fig.1, 20), optical modulators (51RGB) and a color-combining optical device (61).

It would have been obvious to modify the invention disclosed by Kai to include an optical system that guides the light beam to a dichroic prism via optical modulators such as that taught by Yajima for the purpose of projecting the modulated light beam to the screen.

#### ***Allowable Subject Matter***

Claims 14-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

- With respect to claim 14, the prior art of record neither shows nor suggests the elements of heat-conductive sub-reflection mirror with a transparent member attached to the outer surface of the sub-reflection mirror in combination as claimed.
- With respect to claims 15 and 17 the prior art does not teach, in combination with the additionally recited features, a light source device with a characteristic stated by the formula as recited in the claims.
- With respect to claims 19 and 20, the prior art of record neither shows nor suggests a heating device that heats the heat-conductive member in combination as claimed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Kong whose telephone number is 571-272-8062. The examiner can normally be reached on Mon - Fri (8am - 5pm).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AK

  
**JUDY NGUYEN**  
**SUPERVISORY PATENT EXAMINER**